TASK FORCE ON THE FUTURE FOR GROWTH AND DEVELOPMENT IN MARYLAND

Stormwater Management Forum Comments Received After January 15, 2010

CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

January 25, 2010

Mr. Jon Laria, Chair
Task Force on Future Growth and Development in Maryland

Re: Additional Comments from the Chesapeake Bay Foundation

Dear Mr. Laria:

Thank you for the opportunity to do a presentation at the recent Task Force on Future Growth and Development in Maryland forum concerning Maryland's new stormwater regulations. We would like to take this opportunity to respond to some of what we consider to be misinterpretations or falsely-imputed implications of the new rules presented to the task force on January 15th.

1. The health of the Chesapeake Bay can no longer be compromised.

As stated in our remarks at the forum, the underpinning of the environmental community's belief that these new stormwater rules are absolutely necessary is the current state of water quality in the Chesapeake Bay and its tributaries. There is no denying that pollution from urban and suburban lands has been increasing, or that a legally required Total Maximum Daily Load (TMDL) will be imposed on state and local governments to reduce this and other sources of pollution.

We repeat the point we made in our presentation: our local governments – many of the same local governments decrying the new rules - will be responsible for achieving and maintaining exacting requirements on development once the Bay TMDL (and its state and local implementation plans) are issued, and once new MS4 permits are re-issued. The new stormwater standards can only help local governments move farther along toward these critical objectives. Undertaking advanced stormwater management during the process of redevelopment actually proves to be less expansive than if local jurisdictions have to go in after-the-fact to shoehorn retrofits. If redevelopers fail to undertake better stormwater management as these projects are undertaken, the public will be wholly saddled with that burden in the near future.

2. Flexibility is abundant in the redevelopment requirements.

In contrast to the complaints of several local government representatives, neither municipalities nor urban counties are disadvantaged by the law and its new rules. While these presenters noted their general favor for ESD and its benefits for urban neighborhoods and the environment, they did not seem to fully understand the extent of the flexibility

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already accorded urban projects within the regulations. Indeed, presenters mentioned a need for "a watershed-based approach" and the ability to undertake offsets to meet pollution control needs, as well as the need for flexibility to seek off-site solutions when highly urban places constrain on-site practices. *Both approaches are expressly allowed in the regulations as an alternative once on-site ESD practices are evaluated and found not to be practicable.* The simple fact is that the 50% mandate is not "strict" and unyielding, as implied, but rather part of a step-wise process that provides significant flexibility. Asserting otherwise is misleading and unfair.

3. Stringent standards elsewhere have not stymied Smart Growth or redevelopment.

Unfortunately, many presenters made dramatic statements regarding the speed with which they would locate projects somewhere else, on "greenfield" sites despite the fact that there is no evidence from anywhere in the United States that higher stormwater standards have lead to such an end -- although some states and localities have at least equivalent, if not higher, stormwater management standards in place. For example, Montgomery County, Maryland requires the highest "Channel Protection volume" standard of all its projects (i.e. managing for about 2.6 inches of runoff), regardless of location.. The county has granted selective waivers and permitted off-site offsets and contributions where impracticality prevents such a standard from being fully met. With this programmatic flexibility, Montgomery County still requires, at an absolute minimum, twice the stormwater management that these State rules would require (1 inch versus effectively 0.5 inch).

The study we cited in our presentation examined treatment costs for both one inch and 2.6 inches for three urban projects, and found that both standards could reasonably be met with green infrastructure, for about the same, or even at less, cost than with conventional methods. (Contrary to claims about that study, our engineers did, indeed, take into account such issues as underground garages and difficult urban soils.) The customary costs to urban redevelopers of undertaking advanced stormwater management, from 1 .5 to 6 percent of total project costs, are eminently supportable by the profits expected from these highly desirable projects.

Furthermore, the differential standard MDE has established between new development and redevelopment was completely overlooked in many presentations where claims were made that improved stormwater management in urban settings would drive sprawl development into greenfields. The fact is, the treatment differential established by the regulations will require roughly five times the treatment in new greenfield development (Cpv ~2.4 – 2.7 inches) as that required for redevelopment projects. This differential helps to even the financial playing field for both new development and redevelopment and renders it speculative to state unequivocally that greenfield development is cheaper and easier.

4. Project-specific concerns should not be remedied with a categorical "fix."

Finally, it is simply impossible to determine, using the hand-picked projects presented at the forum, whether the new step-wise process of first attempting ESD to the maximum extent practicable, then going to combination solutions, and then off-site alternatives available to

developers under the new regulations, would result in any loss of density, parking, or the economic success of such projects. For example, we cannot know whether the Belcrest site near Prince George's Plaza would necessarily loose six percent of its density at a value of $14M to the developer or whether a more logical solution might be the utilization of different stormwater practices than those the developer chose to describe. An extensive green roof, which according to MDE counts towards reduction of impervious surfaces, may actually be less expensive than a sizeable loss of gross leasable area. We could not help but notice that most projects appeared to simply overlay surface infiltration over planned parking lots and building space to make their calculations, and presumably, their points. Were other practices or slightly different site layouts considered? Would other alternatives be more cost-efficient? And finally, why were there no examples from the jurisdictions in Maryland that currently meet these standards (i.e. Montgomery County or Carroll County)?

It is a new day for all regulated sectors and communities in the Bay watershed. The hard reality is that the status quo is no longer acceptable, as it simply has not achieved the gains in water quality hoped for, or required, to meet new legal requirements. Regardless of what happens with these regulations, the building and development community will be charged with taking increased responsibility for reducing the pollution its projects create, and for cleaning up the pollution that urban centers now experience, when new projects are developed there. We believe that the new regulations, while weaker than those we had sought, are a necessary step in the right direction. We further believe that, given their current flexibility, the alternative methods for meeting the requirements, and the fact that new development must meet a significantly higher standard than redevelopment, smart growth projects are not endangered by the new regulations. Finally, as we noted in our presentation, "smart growth" is about more than just density and location. It is also about livability and walkability, attractive places with attention to providing environmental benefits to residents and customers alike. Urban water quality is a part of that picture and purported smart growth projects without such attention to water quality are probably not that smart after all.

Sincerely,

Jenn Aiosa

Jenn Aiosa
Maryland Senior Scientist

Lee Epstein
Lands Program Director

From: Anne Pearson [mailto:aplace4@verizon.net]
Sent: Wednesday, January 20, 2010 10:55 AM
To: Laria, Jon M. (Balt)
Subject: Smart Growth and Stormwater

I write to you as a member of the Maryland Stormwater Consortium as well as Director of the Alliance for Sustainable Communities. I have working on Smart Growth and Stormwater issues for the past 12-14 years, recognizing the important role an integrated approach to continuing healthy life on earth.

I am deeply disturbed to hear that reservations have been expressed vis a vis the beneficial affects of Stormwater Act requirements on Smart Growth. The effects of Stormwater Runoff on the Bay and all our Rivers and Creeks are manifest. If we are to restore the Bay with its multitude of benefits for human beings we can no longer ignore the deleterious effects of Stormwater Runoff. If we do not INCLUDE the RAIN as an important factor in replenishing the aquifers from which we draw water and continue to throw it away, we do ourselves a grave injury from which it will be difficult to recover as water becomes scarce. If we continue to ignore the fact that the rain is a critical part of the earth's life system, we lose our sense of place in the system of life, the green infrastructure that makes human life possible. If we continue to imagine that we can USE the earth's system in a way that destroys its functions, we destroy our physical, mental and spiritual well being.
Smart Growth is not a separate strategy that can be implemented while ignoring Earth's systems. The RAIN and its appropriate infiltration, as the early forests provided for the Bay watershed when the Bay was healthy, IS part of SMART GROWTH.

I will not repeat here, the excellent facts regarding the costs of growth with and without appropriate integration of the RAIN, which I attach. However, I implore you to give the attached PPT presentation your serious attention, since it proves that even if considering the issue purely from an economic standpoint, a tangible benefit is achieved by including appropriate Stormwater management as an integral part of truly SMART GROWTH.

For the records.

From: Chris Trumbauer [mailto:riverkeeper@westrhoderiverkeeper.org]
Sent: Tuesday, January 26, 2010 2:57 PM
To: Laria, Jon M. (Balt)
Subject: Task Force on Future Growth and Development in Maryland

Dear Mr. Laria,

I was unfortunately not in attendance for the recent Task Force on Future Growth and Development in Maryland forum, but I wanted to take this opportunity to endorse the comments sent to you by Jenn Aiosa of the Chesapeake Bay Trust.

West/Rhode Riverkeeper strongly supports the implementation of the 2007 Stormwater Act as planned. It is critical to properly address stormwater input into our waters, as stormwater is the only major source of pollution to the Bay which is increasing. Counties and municipalities would do well to act proactively to better address this pollution source, as the Chesapeake Bay TMDL and more stringent MS4 permits will require significant pollution reduction. These regulations will help local governments meet these future reductions.

Stormwater versus Smart Growth is a false choice. These stormwater regulations are needed to improve our water quality and make our waterways fishable and swimmable, and our communities livable and enjoyable.

Thank you for your consideration.

Chris Trumbauer

RIVERKEEPER and Executive Director

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From: Stan Sersen [mailto:stansersen@enviro-center.com]
Sent: Sunday, January 24, 2010 3:47 PM
To: Laria, Jon M. (Balt)
Cc: Diane M. Cameron
Subject: Storm water Task Force
Importance: High

To the Task Force on the Future for Growth & Development (c/o Jon Laria):

I am sorry that I was not able to make it to Annapolis on the 15th of January to testify on behalf of the urgent need to make sure the Storm water regulations as established by the storm water act of 2007 are fully implemented.

Smart Growth objectives are indeed compatible with improved stormwater regulations, in fact green infrastructure and stormwater solutions serve to enhance the profitability, livability and sustainability of Smart Growth projects.

I am an Architect and a developer that is committed to focusing on redevelopment sites and in making them regenerative in their design and function. My project, the EnviroCenter in Jessup, MD, is an example of how a redevelopment project can easily not only achieve the minimum redevelopment requirements, but can become an example of one of the nation's first negative storm water discharge sites even in a 100 year storm. All at minimal costs.

I urge that you not permit the short sightedness of financial hardships to once again allow the wrong path to be chosen. We must not ease up on assuring that storm water requirements are not decreased, waived, or grandfathered. Our health and the health of the Chesapeake Bay is at risk.

The implementation of sound Environmental Site Design (ESD) strategies will drastically reduce the harmful effects that past developments have had on the water quality of the Chesapeake Bay and on the critical reductions we have seen in the quality and quantity of water in the underlying aquifer. Increased incentives need to go along with the increased storm water regulations. Developers such as myself see the future of development as being in the Smart Growth areas close to mass transit and in areas that already have the infrastructure to support developments.

Smart Growth is about more than just project density and location. It is also about project performance, appearance, and green infrastructure. ESD stormwater tools can help a project meet a range of environmental, energy/ climate change, water efficiency, aesthetic, social, cultural, economic, and other performance objectives, in new, successful, and exciting ways. And if the particular site is one that has huge challenges then I recommend that a type of cap and trade system be set up so that a type of fee in lieu of can be used ONLY to fund positive corrections within the watershed that the development is adversely affecting.

We must be thinking beyond Green to a new world of regenerative design and development. Only by correcting the past damages can we even think about a sustainable future.

As projects get redeveloped we must insist and require them to meet the newer stricter storm water regulation else we will just be further delaying, and in fact hindering, the work we all must do to save our local ecosystem that is suffering more and more every year that we do not act.

Please help me clean up the Chesapeake Bay, and not allow others to continue down the wrong path of not doing all that they can. It can be done, it must be done, by all of us working together.

Thank you.

Stanley J. Sersen NCARB, LEED AP, RS
Founder

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Committed to creating a sustainable future!

January 18, 2010

Mr. Jon Laria
Task Force on the Future of Growth and Development
Maryland Department of Planning
301 West Preston Street Suite 1101
Baltimore, Maryland 21201

Re: Stormwater management Forum

Mr. Jon Laria:

We would like to thank both you and the rest of the Task Force members for allowing Loiederman Soltesz Associates the opportunity to present our thoughts at the Stormwater Management Forum on January 15. We would also like to thank both MDP and MDE for their input and interest on the topic.

We have spent a considerable amount of time thinking and discussing the regulations and hope that we contributed to the conversation. We believe that we have considered all sides of the topic but welcome additional points of view. We also welcome the opportunity to educate others on these regulations, their benefits, and their impacts.

We have been designing Stormwater devices in Maryland for almost 30 years and believe we have significant expertise in the area of SWM design. We suggested a modest set of revisions to MDE's regulations which we believe will go a long way to help address some concerns that others may have regarding the impact the new regulations have on smart growth projects. These changes do not impact the goals of the regulations to recharge ground water. These changes may in fact make some of the innovative techniques such as green roofs and porous pavement more effective and even palatable as SWM solutions to those who must pay for them. Perhaps if these devices were credited more than the code currently allows, Maryland will begin to see such techniques more often.

While we touched the rationale behind these recommended changes during our presentation at the forum, time was too short to do a thorough explanation. We would like to provide additional information to explain our reasoning behind the suggested changes to the regulations.

Our first suggested change to the regulation is as follows:

> **26.17.02.01.**C. This chapter applies to all new development and redevelopment projects that do not have ~~final approval for erosion and sediment control and stormwater management plans by May 4, 2010~~SWM Infrastructure in place prior to December 31, 2012.

At the Forum, there were several case studies presented where existing development has proceeded and the infrastructure already constructed for multiple phases of a project designed under the current regulations or where significant investments have been made in the long planning process, including negotiations with local citizens, regulatory agencies, governmental officials. These efforts should not be overturned as a result of the new law. MDE has stated that there is flexibility to allow developments of this sort to move ahead without much change to the current approvals, however they emphasize that ESD to the MEP must be met, which seems to counter the claim of flexibility. Therefore the flexibility that is written into the regulations needs to be supported by additional guidance from MDE as to what is acceptable for projects where substantial work has been completed either in construction or in planning. The intent of our suggested deadline would allow any project that has actually constructed a facility or will construct a facility within the next three years not to be penalized by the new regulations. Please note that if the 2000 Design Manual is properly implemented, the release rate from the site should be similar to what is proposed under the new regulations for the one year storm.

Our second suggested revision to the regulations is as follows~~.~~:

> **26.17.02.02.B**(29) "Redevelopment" means any construction, alteration, or improvement performed on sites where existing land use is commercial, industrial, institutional, or multifamily residential and the existing site impervious area exceeds ~~40~~ 30 percent.
>
> **26.17.02.02.B** (41) "Urban development" means using smart growth principles ~~that~~which include the use of multi-story buildings~~,~~ and mixed use developments, create a range of housing opp~~ut~~ortunities, provide a variety of transportation choices, create walkable neighborhoods, and preserve environmental areas. The local authorities shall define the locations and limits.

The first is a simple change to the definition of redevelopment that if the impervious area is greater than 30% then it's considered redevelopment. Several presenters demonstrated that many sites have current impervious areas between 30% and 40% but that would be hard to argue are not "redevelopment" This lowered threshold will fit more potential redevelopment properties and encourage redevelopment.

The second definition is required to help explain our fourth recommended revision, described below. Our goal is to define "urban" development using smart growth principles as opposed to suburban sprawl development which constitutes the vast majority of construction in the State of Maryland.

Our third suggested revision to the regulations will affect alternative measures for redevelopment. The suggested changes are as follows:

26.17.02.05.D

(3) An approving agency ~~may~~ must develop separate policies for providing water quality treatment for redevelopment projects if the requirements of §D(1) and (2) of this regulation cannot be met. To facilitate offsite SWM practices, the approving agency shall establish a "SWM Club" for fee in lieu. ~~Any~~ The separate redevelopment policy shall be reviewed and approved by the Administration and may include, but not be limited to:

(a) Retrofitting;
(b) Stream restoration;
(c) Pollution trading; or
(d) Design criteria based on watershed management plans developed according to §E of this regulation.

The State regulations allow a local community to establish policies for redevelopment if ESD to the MEP cannot be met. However they are not required to do this. It is our belief that not only for urban type development but also for other types of redevelopment, a policy *must* be established to provide an alternative if ESD to the MEP cannot be met for the redevelopment of a particular site. The purpose of this portion of the regulation is to require local agencies to establish a set procedure to ensure that any fee-in-lieu collected will be reinvested back into BMP retrofitting or stream restoration within the watershed, both of which are important long term measures that will begin to improve the water quality of the Chesapeake Bay. The "SWM Club" needs to have a fund separate from a local municipal or county general fund to make sure that all monies deposited into it will go toward the intended benefit of improving local stream quality. The policy needs to include fee structures, goals for various watersheds, identification of specific projects that can be constructed by a single developer, and identification of "SWM Club" projects which will require the funds from multiple developments that the County or local jurisdiction can then use to make improvements.. In many cases, the work will be done on public property. However, it is important for the local jurisdiction to take the lead and smooth the way if work will be done on private property.

The fourth suggested revision to the regulations will establish a two step process to determine if structural practices may be the appropriate primary treatment as opposed to non-structural practices. The following is the suggested changes to the regulations:

26.17.02.06.A(2) Determine if the development meets the requirements as established by the counties and their municipalities for urban development.

(a) All counties and their incorporated municipalities shall require that the planning techniques, nonstructural and structural practices, and design methods specified in the Design Manual be used to implement ESD to the MEP. Stormwater management plans for development projects subject to this chapter shall be designed using the ESD sizing criteria, recharge volume, water quality volume, and channel protection storage volume criteria according to the Design Manual. The MEP standard is met when channel stability and 100 percent of the average annual predevelopment groundwater recharge are maintained, and

nonpoint source pollution is minimized wether structural or non structural practices are used..

(b~~2~~) For all other areas, a~~A~~ll counties and their incorporated municipalities shall require that the planning techniques, nonstructural and structural practices, and design methods specified in the Design Manual be used to implement ESD to the MEP. Stormwater management plans for development projects subject to this chapter shall be designed using the ESD sizing criteria, recharge volume, water quality volume, and channel protection storage volume criteria according to the Design Manual. The MEP standard is met when channel stability and 100 percent of the average annual predevelopment groundwater recharge are maintained, nonpoint source pollution is minimized, and structural stormwater management practices are used only if determined to be absolutely necessary.

The proposed changes that we are making would only apply to "urban" areas and not to suburban areas. It would be up to the local jurisdiction to define what constitutes an urban area in their locality to remove the impediments to Smart Growth by requiring (non-structural) ESD to the MEP. Urban areas require efficient use of land to be viable, which generally requires underground stormwater management. The revision removes the requirement to allow structural practices "only if determined to be absolutely necessary" and allow the use of structural practices in combination with nonstructural practices as a first option for "urban" areas only.

The last suggested change is to page 5.42 of the new Design Manual and revises how the runoff amount for a green roof is determined. The following is our suggestion to the current manual text:

Performance:
When designed according to the guidance provided below, the rooftop area covered by a green roof will have runoff characteristics more closely resembling grassed or open space areas. The capacity of a green roof to detain runoff is governed by planting media thickness and roof slope or "pitch". However, the RCN's shown in Table 5.4 below are used to determine how green roofs contribute to addressing the ESD Sizing Criteria.

Table 5.4 Effective RCN's for Extensive Green Roofs

Roof Thickness (in.):	2	3	4	6	8
Effective RCN:	94	92	88	85	77

Because impermeable liners are an integral component in all systems, green roofs do not provide groundwater recharge. Therefore, additional treatment is needed to compensate for the loss of recharge from rooftop areas. This is equal to Re_v for

the rooftop area and may be provided in separate infiltration practices or as additional storage within downstream ESD practices.

A volumetric analysis may be performed in lieu of using the RCN's numbers above to determine the effectiveness of a green roof in the overall stormwater management design. The recharge requirement is the same as stated above.

For example, if one were to compare the volume of storage available between a green roof and micro bioretention facility, it can be demonstrated that the green roof has the same available storage yet is treated differently than micro bioretention. Based on a 20,000 square foot flat green roof, 6 inches thick with 75% of the area available for water storage and a porosity of 40%, the green roof will have 3,000 cubic feet of storage available. At the same time, micro bioretention facility also treating a 20,000 square foot paved area requires about 3,100 cubic feet of storage Page 5.96) with a required Pe of 2.6". The results are almost the same and would only require increasing the available roof area by a couple of percent to meet the required volume for a micro bioretention facility

According to the Table 5.4 (above) for a 6" thick green roof, a RCN of 85 is used, and with an underlying B soil, this green roof would only meet 0.6" of the required 2.6" to satisfy the Precipitation Equivalent (Pe). This results in very little benefit for the expense.

In addition, based on a paper written by Charles Miller, who has written numerous papers on green roofs and whose work is noted in the references in the new Chapter 5 of the SWM Design Manual, it was determined that for a 3.2 inch green roof during a 2.8 inch rainfall (equivalent to the 1 year storm), the RCN is 66 . More research is needed on flat roofs to determine the actual curve number that should be applied to ensure that the maximum credit is given to green roofs to encourage their use as a Stormwater Management tool.

We would be happy to discuss these issues with you in further detail at your convenience. If you have any questions, please contact Ken Dunn or Mike Wagner at 301-794-7555.

Sincerely,

LOIEDERMAN SOLTESZ ASSOCIATES

Ken Dunn, RLA, AICP, LEED AP
Vice President

Cc: Michael Wagner
Jim Soltesz

Title 26 Department of the Environment
Subtitle 17 Water Management
Chapter 02 Stormwater Management

26.17.02.01

C. This chapter applies to all new development and redevelopment projects that do not have ~~final approval for erosion and sediment control and stormwater management plans by May 4, 2010~~SWM Infrastructure in place prior to December 31, 2012.

26.17.02.02.B

(29) "Redevelopment" means any construction, alteration, or improvement performed on sites where existing land use is commercial, industrial, institutional, or multifamily residential and the existing site impervious area exceeds ~~40~~ 30 percent.

(41) "Urban development" means using smart growth principles that include multi-story buildings, mixed use developments, create a range of housing opputunities, provide a variety of transportation choices, walkable neighborhoods, and preserve environmental areas. The local authorities shall define the locations and limits.

26.17.02.05.D

(3) An approving agency ~~may~~ must develop separate policies for providing water quality treatment for redevelopment projects if the requirements of §D(1) and (2) of this regulation cannot be met. To facilitate offsite SWM practices, the approving agency shall establish a "SWM Club" for fee in lieu. ~~Any~~ The separate redevelopment policy shall be reviewed and approved by the Administration and may include, but not be limited to:

(a) Retrofitting;

(b) Stream restoration;

(c) Pollution trading; or

(d) Design criteria based on watershed management plans developed according to §E of this regulation.

26.17.02.06.A

(2) Determine if the development meets the requirements as established by the counties and their municipalities for urban development.

(a) All counties and their incorporated municipalities shall require that the planning techniques, nonstructural and structural practices, and design methods specified in the Design Manual be used to implement ESD to the MEP. Stormwater management plans for development projects subject to this chapter shall be designed using the ESD sizing criteria, recharge volume, water quality volume, and channel protection storage volume criteria according to the Design Manual. The MEP standard is met when channel stability and 100 percent of the average annual predevelopment groundwater recharge are maintained, and nonpoint source pollution is minimized.

(b~~2~~) For all other areas, a~~A~~ll counties and their incorporated municipalities shall require that the planning techniques, nonstructural and structural practices, and design methods specified in the Design Manual be used to implement ESD to the MEP. Stormwater management plans for development projects subject to this chapter shall be designed using the ESD sizing criteria, recharge volume, water quality volume, and channel protection storage volume criteria according to the Design Manual. The MEP standard is met when channel stability and 100 percent of the average annual predevelopment groundwater recharge are maintained, nonpoint source pollution is minimized, and structural stormwater management practices are used only if determined to be absolutely necessary.

Page 5.42 from the Maryland Stormwater Design Manual

Performance:

When designed according to the guidance provided below, the rooftop area covered by a green roof will have runoff characteristics more closely resembling grassed or open space areas. The capacity of a green roof to detain runoff is governed by planting media thickness and roof slope or "pitch". However, the RCN's shown in Table 5.4 below are used to determine how green roofs contribute to addressing the ESD Sizing Criteria.

Table 5.4 Effective RCN's for Extensive Green Roofs

Roof Thickness (in.):	2	3	4	6	8
Effective RCN:	94	92	88	85	77

Because impermeable liners are an integral component in all systems, green roofs do not provide groundwater recharge. Therefore, additional treatment is needed to compensate for the loss of recharge from rooftop areas. This is equal to Re_v for the rooftop area and may be provided in separate infiltration practices or as additional storage within downstream ESD practices.

A volumetric analysis may be performed in lieu of using the RCN's numbers above to determine the effectiveness of a green roof in the overall stormwater management design. The recharge requirement is the same as stated above.

Storm Water Association
of Maryland

January 19, 2010

VIA E-Mail & First Class Mail

Mr. Jon Laria
Chairman
Task Force on the Future for Growth and Development in Maryland
Ballard Spahr LLP
300 East Lombardy Street, 18th Floor
Baltimore, Maryland 21202-3268

Re: Maryland Stormwater Regulations

Dear Mr. Laria:

I am writing on behalf of the Storm Water Association of Maryland ("SWAM"). SWAM is a group of Maryland localities charged with implementing stormwater management programs in their communities. Our members support aggressive but reasonable storm water control programs.

We attended last Friday's Stormwater Management Forum, and were impressed not only by the turnout, but by the willingness of the Task Force to hear from stakeholders on this important topic. Although SWAM did not provide testimony during the Forum, I am writing to provide our comments on several key issues. We hope that the Task Force will consider these comments as you develop recommendations regarding MDE's existing stormwater management regulations.

Preliminarily, I would note that SWAM has been actively participating in the development of these regulations since 2008, and raised a number of the concerns expressed last Friday well over a year ago. I have attached a copy of our comments ("Jan. 2009 Comments") to MDE regarding their proposed regulations for your review.

While MDE did make a number of changes to the proposed regulations in response to SWAM (and other stakeholder) comments, they ultimately did not address a number of significant issues that we raised. These issues, which include the redevelopment policy, the use of ESD practices, and local inspection requirements, continue to be of great concern to locality storm water managers.

Accordingly, we ask that the Task Force consider our Jan. 2009 Comments and the following additional thoughts:

Phase In Redevelopment Requirements

SWAM has been gravely concerned that MDE did not really understand the impact on redevelopment of its 40% threshold rule and the increase from 20% to 50% reduction/treatment requirement. We believe these two requirements will significantly dampen redevelopment and Smart Growth in Maryland. Unfortunately, we believe that MDE did not take the time – despite our urging – to carefully evaluate the impact of these two more stringent requirements on redevelopment before adopting them. Jan. 2009 Comments at p. 3-4. Several speakers echoed this point during the Forum, and provided specific examples of impacts on redevelopment projects in urban corridors.

We believe the appropriate approach given MDE's lack of information and the unprecedented economy is to phase in the new requirements. For example, the 40% threshold rule should be set at a lower level – say 25% for five years, with a mandate that MDE must project the impact of increasing that percentage before increasing it after five years. MDE should be required to make an affirmative showing that the threshold limit did not unreasonably burden redevelopment projects. Otherwise, the threshold should be reduced or removed if we really want Smart Growth to work.

Similarly, with regard to the 50% reduction/treatment rule, SWAM suggests that the current 20% requirement be increased to 25% for five years. If MDE makes a finding that the 25% requirement has not had an unreasonable burden on redevelopment, the level could increase thereafter.

Both of these approaches would allow MDE to do what we suggested when we filed our comments in January, 2009—to gain some experience on how these new mandates will actually impact Smart Growth before making major changes in the redevelopment policy. Both approaches would also make improvements in water quality by increasing treatment requirements over existing levels for many projects.

Provide Regulatory Incentives for ESD Practices for Redevelopment

In our earlier comments, SWAM made two key points on the use of ESD practices: (1) we questioned whether these techniques are actually legally required for redevelopment sites and (2) we suggested that MDE broaden the definition of "maximum extent practicable" to make it clear that in certain cases ESD is not "practicable." Jan. 2009 Comments at p. 1-2. In its final regulations, MDE did not make any distinction between new development and redevelopment with regard to ESD practices (ESD is required on both before traditional measures can be used). However, MDE did change the definition of MEP in response to SWAM (and other stakeholder) comments.

If the Task Force makes recommendations regarding ways to improve or clarify the statute, we ask that you consider these points. The Stormwater Management Act of 2007 does not clearly require the use of ESD practices on redevelopment sites. This does not mean that SWAM opposes their use on certain sites. However, if we want to carefully guard the future of Smart Growth, the statute could be clarified to set a different standard for ESD on redevelopment sites versus new development sites. For example, instead of requiring ESD to the MEP for redevelopment for those sites that are providing treatment (versus reducing impervious area), perhaps the General Assembly would consider setting incentives for the use of ESD (*e.g.*, redevelopment sites using ESD techniques could be required to treat 20% of impervious area, versus a 25% standard for using traditional practices). This is the type of real world incentive that will be necessary in our view to motivate the private sector to really embrace ESD, particularly in this economy.

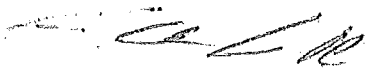
Streamline New Regulatory Requirements on Localities

Lastly, SWAM asks that the Task Force consider our January, 2009 comments on local inspection. Jan. 2009 Comments at p. 6-7. We strongly agree with comments made at the Forum regarding the expense of requiring mandatory inspections of all ESD practices every three years and the major difficulty associated with requiring inspections on private property.

We ask that the Task Force recommend an alternative approach that would either: (1) allow owners of ESD facilities to certify their proper operation and maintenance each year to the locality or (2) categorize these facilities as major or minor based upon their size. Under the first approach, localities would develop a list of owners who fail to certify their facilities and either perform a follow-up inspection or reduce any stormwater fee waivers or incentives they may be received due to their failure to submit a certification. Under the second approach, localities would inspect major facilities on a regular basis, and would only inspect minor facilities if the locality received a complaint or through an auditing program.

In conclusion, SWAM would like to thank the Growth Task Force for taking up this important topic. Stormwater management is an issue of enormous importance to local government. If you have any questions about these comments or about our Jan. 2009 Comments, or if we could be of assistance as the Growth Task deliberates its future actions, please feel free to contact Lisa Ochsenhirt (lisa@aqualaw.com) or myself at your convenience.

Sincerely,



Paul Calamita
General Counsel
Storm Water Association of Maryland

Attachment

C: Hon. Maggie McIntosh (Chair, House Env. Matters Comm.) (by e-mail)
Hon. Shari T. Wilson (by e-mail)
SWAM Members (by e-mail)

Storm Water Association
of Maryland

January 5, 2009

Renee Matthews
Regulations Coordinator
Maryland Department of the Environment
1800 Washington Boulevard, STE. 440
Baltimore, Maryland 21230-1708

VIA E-MAIL & 1ST CLASS MAIL

Dear Ms. Matthews:

Attached are the comments of the Storm Water Association of Maryland on the Department's proposed changes to Maryland's stormwater regulations (COMAR 26.17.02.01-26.17.02.06, 26.17.02.08-26.17.02.11) and to the 2000 Maryland Stormwater Design Manual.

Please contact me if you have any questions regarding these comments.

Sincerely,

Paul Calamita
General Counsel
Storm Water Association of Maryland

Enclosure

Comments of the Storm Water Association of Maryland on MDE's Proposed Changes to Maryland's Stormwater Regulations and 2000 Stormwater Management Design Manual

I. Introduction

Pursuant to the Notice of Proposed Action published in the Maryland Register on December 5, 2008, the Storm Water Association of Maryland (SWAM) provides the following comments on behalf of its members.

SWAM is a group of Maryland localities charged with implementing stormwater management programs in their communities and several of the consulting firms that assist them with their efforts. SWAM was formed to give these localities a voice on critical stormwater issues at the local, state, and federal level.

Because SWAM members are responsible for stormwater management in their communities, SWAM is in an excellent position to provide real-world, on-the-ground feedback on MDE's proposed regulations and changes to the Design Manual.

SWAM appreciates the opportunity to provide these comments.

II. Comments

A. MDE's Proposed Definition of MEP Is Too Narrow

MDE has proposed the following definition for MEP: "'Maximum extent practicable (MEP)' means designing stormwater management systems so that all opportunities for using ESD planning techniques and treatment practices are exhausted before a structural BMP is implemented on a development project." (COMAR 26.17.02.02 (B)(22))[1]

MDE's proposed definition of MEP is too narrow and is inconsistent with the statute. ESD is required; however, this requirement is qualified by the language that requires ESD only to the maximum extent practicable as well as the express language which contemplates that project proponents may use standard BMPs in certain situations.

[1] References to COMAR in these comments are to the proposed revisions to COMAR, and not to the current regulations.

If MDE chooses to define MEP (note that the General Assembly chose not to define MEP in the Act), it should recognize that there are situations where ESD is not practicable. At a minimum, MDE's definition should say "all practicable opportunities for ESD have been exhausted". Even better would be if MDE included a list of factors that should be considered in determining the extent to which ESD practices are practicable. For example, developers should be permitted to present evidence that particular ESD designs would be cost-prohibitive (i.e., not feasible) for a particular site/project, or that site specific conditions limit the feasibility of ESD techniques. The presence of historic or heritage resources would be such a factor. A developer should not be expected to disturb a portion of a historic battlefield, for example, in order to build rain gardens or add bioretention swales.

At bottom, we are concerned that MDE's proposed "exhaustion" requirement for ESD practices be qualified by the "practicability" language from the Statute.

Further, MDE should clarify that the MEP requirement is geared toward ensuring that "State and local programs will ... maintain after development, as nearly as possible, the predevelopment runoff characteristics." This change will clarify that the law does not require ESD for ESD's sake but rather to maintain, as nearly as possible, predevelopment runoff characteristics.

B. MDE's Proposed Redevelopment Policy Could Harm Smart Growth In Maryland

i. State Law Does Not Mandate the Use of ESD on Redevelopment Sites

SWAM submits that ESD is not a legal imperative for redevelopment sites. The Act does not require parallel treatment of development and redevelopment. Redevelopment is specifically mentioned twice in §4-203: (i) MDE must issue rules and regulations that "[i]ndicate that water quality practices may be required for any redevelopment, even when predevelopment runoff characteristics are maintained." (§4-203(b)(6)) and (ii) Stormwater management plans must be designed to "minimize pollutants in stormwater runoff from new development and redevelopment" in order to meet a set of broad water quality, public health and use goals. (§4-203(b)(8)(iv)). If the Maryland General Assembly had meant for all of the terms of §4-203, including ESD, to apply equally to both development and redevelopment, the Act would either have clearly noted that the requirements applied to both or would have used one comprehensive term consistently that included both.

While some may oppose ESD for redevelopment projects outright, SWAM notes this statutory structure simply to make the point that MDE has discretion in when and how it elects to apply ESD requirements to redevelopment projects. MDE should ensure that it retains that discretion so as not to overly burden redevelopment opportunities.

ii. MDE's Proposed Redevelopment Policy is Unwise and Unsupported

Even if the Statute were interpreted to require ESD for redevelopment sites, MDE's proposed policy is overly burdensome on redevelopment and will be counterproductive.

MDE has proposed several significant changes that make its existing redevelopment policy much more stringent.

First, redevelopment projects on sites with less than 40% impervious area or that would result in "any net increase in impervious area" would be treated as new development. (COMAR 26.17.02.05 (D)(4)).

Second, for redevelopment projects that have more than 40% existing impervious area, reduction/treatment of impervious area would increase from the current level of 20% to 50% using ESD to the MEP. Alternative stormwater measures could be used "if impervious area reduction and ESD have been implemented to the MEP." An approving agency could also "develop separate policies" for redevelopment sites where COMAR requirements cannot be met, subject to MDE review and approval. (COMAR 26.17.02.05 (D)(1)-(3))

SWAM is concerned that these policy changes will be counterproductive because they will chill developer interest in redeveloping urban properties. Instead, we will see some redevelopment shift to green field projects. MDE should do no harm, particularly in this economic climate. Urban redevelopment is good for Maryland communities and it is good for the environment when compared to greenfield development.

This is self-evident just from a wastewater treatment perspective. Almost every urban redevelopment project will be served by a state-of-the-art enhanced nutrient removal wastewater treatment plant, funding in large part by the State. Conversely, green field projects will be served by private onsite systems. ENR treatment plants will meet 3 mg/L total nitrogen while onsite systems will perform at either 40 mg/L (No nutrient removal) or approximately 20 mg/L if using nutrient removal. Thus, there is a 7-13 times greater likely impact in wastewater nitrogen loads from every house served by onsite systems as opposed to urban ENR treatment plants.

Before MDE makes the major changes in the statewide redevelopment policy proposed in this rule, we believe MDE should have a more substantial understanding of the impact of the proposed changes.

At a minimum, MDE should share with the public its understanding of the reductions which have actually been achieved on a variety of redevelopment projects to date. If we have not even achieved the current 20 percent requirement, that would be a major caution against raising the bar until we better understand why the 20 percent requirement has been elusive. Moreover, MDE should determine what level of redevelopment restoration has really been achieved in other states and what the

projected impact is in Maryland of the more stringent requirements noted above. MDE has been absolutely silent about any quantifiable projections/predictions about the impact of these changes. This is simply too important a change to proceed without any meaningful impacts analysis.

SWAM also questions whether MDE has the legal authority to treat redevelopment so stringently. We must presume that the General Assembly understood the existing redevelopment policy when it passed the Act. If the General Assembly had meant to require additional treatment for redevelopment, it could have added statutory language to make that policy change. Thus, we don't believe the SWMA of 2007 provides MDE with the legal authority to impose such stringent restoration requirements. MDE should seek guidance from the Attorney General's Office on this question.

SWAM acknowledges that MDE has included some "outs" for those redevelopment projects that legitimately cannot meet the 50% target. However, these "outs" will be of little help if developers decide up-front that redeveloping a property is not worth the trouble. If we drive the costs (time and money) of redevelopment up, developers will have a significant incentive to develop greenfields, and we will have missed a significant smart growth opportunity.

Until MDE justifies its proposed policy, the existing redevelopment policy (the 20% rule, without the 40% threshold requirement) should stand.

iii. MDE's Definitions of "Redevelopment" in the Design Manual Are Inconsistent

SWAM believes that there is a discrepancy in the Design Manual regarding the definition of "redevelopment." On page 1.14, redevelopment is defined as "any construction, alteration or improvement exceeding five thousand square feet of land disturbance...." On page 5.117, redevelopment is defined as "any construction, alteration, or improvement that disturbs 5,000 square feet or more of impervious areas..." The latter definition should be changed to be consistent with the definition on page 1.14.

C. <u>MDE's Proposed Regulations and Changes to the Design Manual Will Have Significant Negative Impacts on Maryland Localities</u>

i. MDE's Deadlines for Updating Local Codes Are Inadequate

MDE's regulations set a July 1, 2009 deadline for counties or municipalities to propose revisions to their ordinances to implement the "policies established in the Design Manual." Counties or municipalities will also have to submit "[d]escriptions of other program elements...as requested by the Administration" in order to "ensure that the policies and practices established in the Design Manual" are implemented by December 31, 2009. (COMAR 26.17.02.03 (E))

These time lines are inadequate. Localities need time to implement these significant regulatory changes. Maryland localities need at a minimum one year to implement changes to their stormwater management ordinances and two years to implement changes to other sections of local code. The reality is that these codes are likely intertwined such that a two year requirement for an overall code update is more realistic.

MDE's own regulatory process is proof that these are difficult issues that demand serious consideration. MDE has taken time for public outreach, multiple work sessions on specific issues, and public hearings. Localities should be given the same opportunity. Expecting localities to identify and propose changes to local codes in six months or less is unreasonable.

ii. MDE's Requirement that Localities Modify Planning, Zoning, and Public Works Codes is Poorly Worded

MDE's proposed regulations state that: "The use of the ESD planning techniques and treatment practices specified in this section may not conflict with existing State law or local ordinances, regulations, or policies. Counties and municipalities shall modify planning and zoning ordinances and public works codes to eliminate any impediments to implementing ESD to the MEP according to the Design Manual." (COMAR 26.17.02.08(B)(3))

The first sentence is unclear. If MDE is letting developers and localities know that ESD is not required if it conflicts with existing law, MDE should clarify this point. The second sentence should obligate localities to endeavor to eliminate any impediments to implementing ESD to the extent that those changes would not conflict with public safety or other compelling public policy concerns.

SWAM requests that MDE consider the following language: "Counties and municipalities shall modify planning and zoning ordinances and public works codes to eliminate any impediments to implementing ESD to the MEP according to the Design Manual; however, counties and municipalities shall not be required to modify ordinances and codes if such revisions would result in a violation of federal, state or local law, regulation or policy or if such revisions would negatively impact other compelling public policies, including, but not limited to, public safety." An example of the need for this qualifier is road widths. Localities face competing social needs in terms of having adequately wide roads for safe public travel and access by safety vehicles (i.e., fire/EMS equipment) while trying to minimize impervious surface area for ESD/storm water management purposes. As currently written, MDE's ESD regulation could be read to trump all other considerations. We do not think that is legally correct, necessary, or warranted.

iii. Expecting Localities To Police Every ESD Practice Is Unreasonable

MDE's proposed regulations would require that ordinances "specify" that all ESD practices and structural measures will be "documented and remain unaltered by subsequent property owners." Owners of these BMPs are required to obtain approval from the approving agency "before any stormwater management practice is altered." (COMAR 26.17.02.08 (D))

If a locality could potentially be held responsible for failing to police private BMP owners, SWAM objects. Maryland's localities cannot ensure that its citizens will obtain prior approval before they alter BMPs. This task would be particularly difficult for BMPs on private property. This requirement would be in addition to the additional inspection work suggested by MDE in its proposed regulations.

SWAM recommends that MDE clarify that a locality should only be required to follow-up with property owners if the locality receives information (via inspection or third-party report) that an ESD-related violation has occurred.

iv. MDE's Proposed Treatment of Construction Inspections In COMAR is Inconsistent with Language in the Design Manual

MDE's proposed regulations would require that: "At a minimum, all ESD and other nonstructural practices shall be inspected upon completion of final grading, the establishment of permanent stabilization, and before issuance of use and occupancy approval." (COMAR 26.17.02.10 (B)). This is inconsistent with language in the Design Manual that would require use and occupancy inspections for only three ESD practices: green roofs, rooftop disconnects, and sheet flow to a conservation area. MDE should not impose overly broad inspection requirements; especially interim inspections for ESD practices.

v. Expecting Localities to Inspect All Post-Construction Stormwater Management Measures is Unreasonable

MDE's regulations would require that a county or municipality "ensure preventive maintenance through inspection of all stormwater management systems," including ESD and structural facilities. (COMAR 26.17.02.11 (A)) Inspections would be done once "during the first year of operation" and "then at least once every 3 years after that." As a part of the inspection report, a locality must include "An assessment of the quality of the stormwater management system related to ESD treatment practice efficiency and the control of runoff to the MEP." (COMAR 26.17.02.11 (B)(3))

Maryland counties and municipalities should not be required to inspect all stormwater facilities on a triennial basis. Not only does this raise practical questions about accessing very small ESD facilities on private property, but it could be very time consuming and expensive.

SWAM recommends two potential alternatives. Maryland localities could require owners to provide an annual certification that ESD facilities are functioning properly. If an owner fails to do so, the property would go on a list of suspect properties that need to be inspected or for which tax benefits (such as lower storm water fees) are voided. Or, MDE could categorize ESD facilities as either major or minor facilities. Facilities that are publicly accessible and with a larger footprint would fit within the major facilities category, and would be inspected more frequently; facilities on private property and with a smaller footprint would fit within the minor facilities category, and would be inspected less frequently.

Additionally, MDE should clarify what it means by "assessment." Does MDE expect localities to do a visual assessment or something more quantitative such as a chemical/biological assessment? SWAM recommends that MDE define assessment to include a visual inspection.

vi. MDE's Proposed Three-Step Stormwater Management Review Could Put Counties and Municipalities At Legal Risk

MDE has included in the Design Manual a three-tiered stormwater plan review and approval process. After each step (Concept, Site Development, Final), Maryland localities would be required to approve the stormwater management plan provided as a part of that step. (Design Manual, Section 5.1.2)

SWAM continues to be concerned that creating additional approval processes opens the door for lawsuits and appeals processes that do not currently exist. This is particularly problematic given the evolving nature of the plans involved (each step requires more and more detail). SWAM recommends instead a review and concurrence process for each step. Review and concurrence would serve the same purposes, but would relieve the locality of potential legal consequence for decisions it makes based on partial data. Only once the locality decides on the development project as a whole (and not just the ESD component) should it face legal challenge for its decision.

vii. MDE's Proposed Three-Step Stormwater Management Review Is Burdensome and Unnecessarily Prescriptive

MDE's three-tiered stormwater plan review and approval process will increase the number of reviews and staff time needed for these reviews. SWAM members are concerned about the impacts of this change on local budgets.

Furthermore, MDE's approach is unnecessarily prescriptive. Given that each Maryland locality is unique in its approach to plan review, each Maryland locality should be permitted to design a review process that fits its own structure and staffing levels. Localities are in the best position to maximize efficiency. If MDE adopts this approach, it would signal to localities that it understands that reviews of stormwater management plans are done at the local level with local dollars. Of course, MDE could retain the right to approve alternative plan review processes.

As an alternative, MDE should consider creating a streamlined review approach for smaller projects. Larger projects would still be required to go through a three-tiered review process. However, smaller projects (less than 1 acre disturbed or subdivisions with less than 5 lots) would be allowed to eliminate the concept and site development plans.

viii. MDE Should Allow Grandfathering

SWAM agrees with those who commented at the December 8, 2008 public hearing that grandfathering should be explicitly included in the regulations and Design Manual.

To the extent that MDE makes sweeping changes, developers who have submitted stormwater plans prior to the adoption of these changes or who have approved plans in place should be allowed to grandfather their plans under the rules of the road in effect when those plans were submitted. Additionally, developers who are working on multi-phase subdivisions or commercial developments that have one portion of the property built out should be allowed to grandfather future phases if applying the new regulations and design requirements would negatively impact the development as a whole. For example, if a developer has sized a traditional stormwater facility so that it will accommodate future phases of a subdivision, the developer should be allowed to use that capacity in future phases.

This is clearly an important issue for the development community, but it is also an important issue for Maryland localities. If stormwater management plans are currently in the queue, MDE should not require a do-over of the entire review process. And, in the case of multi-phased properties, requiring additional stormwater facilities that are unnecessary will increase the number of projects that a locality will be required to inspect.

D. Woods in Good Condition Is the Wrong Target for ESD Implementation

MDE has re-written its Design Manual to require that developers size ESD techniques to "maintain predevelopment runoff characteristics..." of "woods in good condition." (Design Manual, Section 5.2)

Maryland law (§4-203(b)(1)) requires that stormwater management "maintain after development, as nearly as possible, the predevelopment runoff characteristics;" Requiring development to mimic "woods in good condition"—not at all the natural state of many development sites--goes above and beyond what the law requires. Additionally, §4-203(b)(2) requires that MDE's rules and regulations shall "[m]ake allowance for the difference in hydrologic characteristics and stormwater management needs of different parts of the State..." How can a blanket design policy of "woods in good condition" meet this requirement of the law? Clearly the General Assembly understood that one-size does not fit all, and that flexibility is needed depending on individual circumstances.

SWAM requests that MDE revise this section of the Design Manual to allow for a proper characterization of the existing site in its predevelopment state. MDE has stated that having a uniform approach to predevelopment conditions will result in a "reasonable standard that is...applied without opportunity for misrepresentation." (Design Manual at 5.17) MDE's desire to limit the potential for site misrepresentation, however, does not justify creating a fiction of its own. Pretending that a cleared farm field or, for that matter, a redevelopment site that does not meet the 40% threshold required by the proposed redevelopment policy, has a natural condition of "woods in good condition" cannot in most cases accurately characterize the predevelopment site conditions and would result in stormwater design requirements that exceed what the General Assembly has prescribed. We believe this requirement is legally untenable and should be revised.